CM STORM

SENTINEL ADVANCE

OPERATOR'S MANUAL

DESIGNED TO SEARCH AND DESTROY

CMSTORM SENTINEL ADVANCE

TABLE OF CONTENTS

- Introduction 03
- Package Contents 03
- Sentinel Advance Outlook 04
- Hardware Setup and Sofware Installation 05
- LAN-friendly Driverless Setup 06
- Hardware Control 07
- Main Control 08-12
- Game Profile 13
- Color Control 14-15
- Macro 16-17
- Script 18-19
- The Library 20
- Support and Update 21
- Q&A 22-23

For manuals in other languages please visit:
http://www.cmstorm.com/sentinel_advance/manual

Introduction

CMSTORM SENTINEL ADVANCE

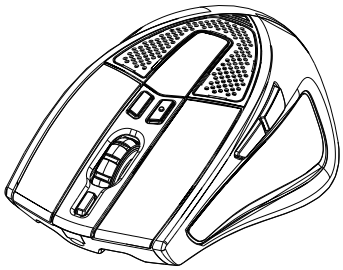
Design for One Purpose: To Search and Destroy

Fortified with uncompromising tactical performance and superior in-hand ergonomics, the Sentinel Advance gaming mouse was developed within the CM Storm Labs with the pure intent to empower up and coming talent with the hardware that the best e-sport pros demand.

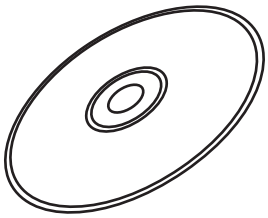
Fully equipped with the latest state-of-the-art technology, the Sentinel Advance is armed with a Doppler Effect twin-laser sensor, which enables lag-free play, doubles the precision, and has a maxed-out 5600 DPI resolution. To top it off the Sentinel Advance is completely built with unprecedented tactical controls like: customizable lighting effects, OLED management, adjustable weight system, on-the-fly swappable gaming profiles and an intelligent encoding engine to perform complex scripts and macros. Best of all the Sentinel Advance gaming mouse is LAN-party friendly and theft proof with the patented security of StormGuard™.

Enhanced and engineered for triumphant victory, the CM Storm Sentinel Advance is your weapon of choice.

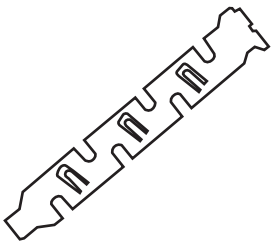
Package Contents



1 Sentinel Advance Gaming Mouse



2 Storm Tactic AP Software



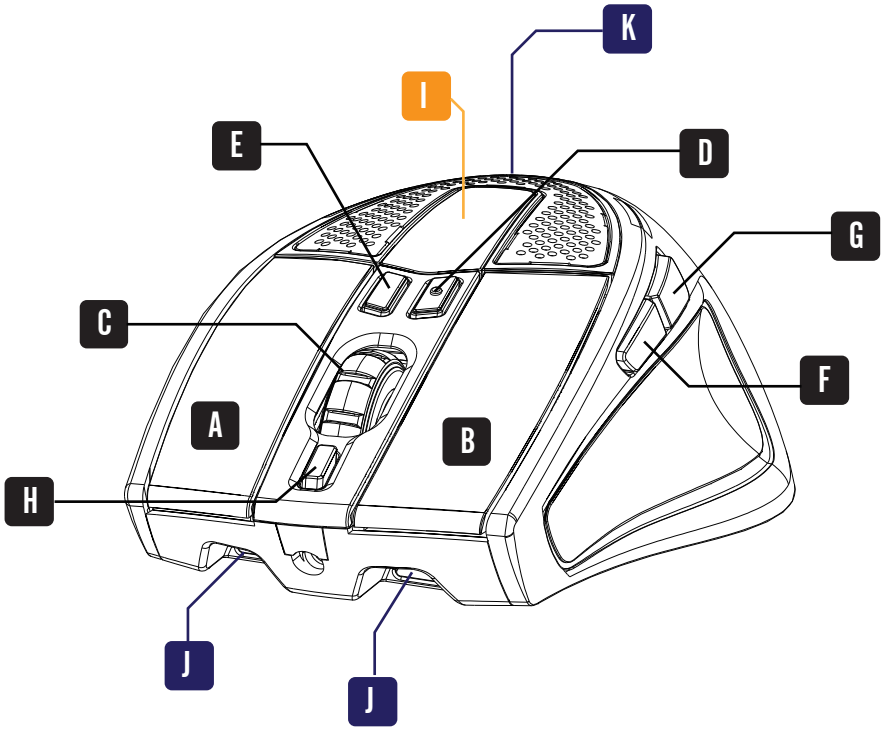
3 StormGuard™

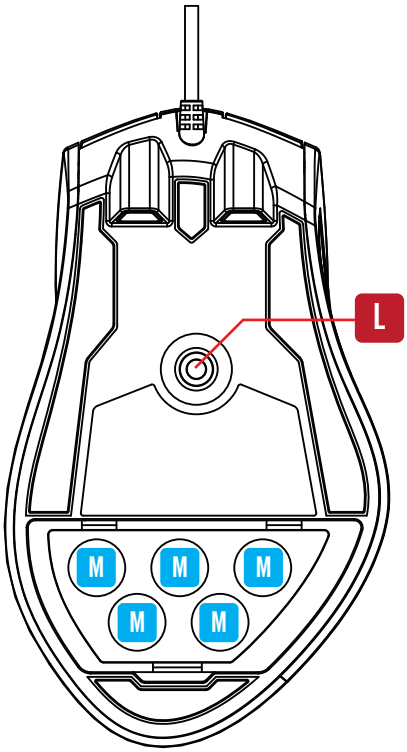
For manuals in other languages please visit:
http://www.cmstorm.com/sentinel_advance/manual

Sentinel Advance Outlook

- Mechanical Buttons
- Octoshade™ LED Tech
- OLED DPI System
- Storm Tactical™ Sensor
- Weight System

A	Button 1	Left Click
B	Button 2	Right Click
C	Button 3	Middle Button/Scroll Wheel
D	Button 4	DPI +
E	Button 5	DPI -
F	Button 6	Side Button (IE, Forward)
G	Button 7	Side Button (IE, Backward)
H	Button 8	Storm Profile Button
I	OLED	OLED DPI Management System
J	LED	Octoshade™ Front LED
K	LED	Octoshade™ Top LED
L	Sensor	Storm Tactical™ Twin-laser Sensor
M	WS	Weight System Compartment



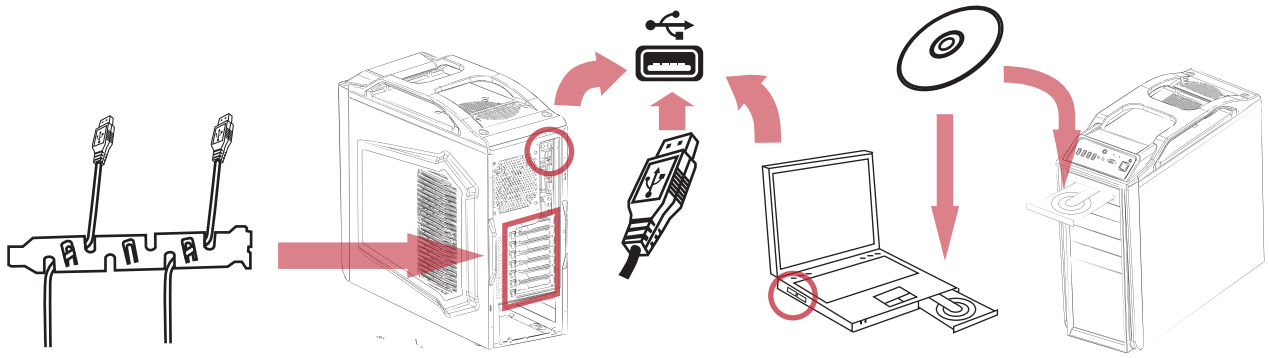


Hardware Setup and Software Installation

The Sentinel Advance is a full-speed, plug and play USB gaming mouse. If your computer system supports plug and play, drivers will be optional for installation. Although most USB ports today are hot-swappable, we do recommend shutting down your system before plugging in or removing the USB device.

System Requirements:

Windows® 2000/XP/Vista/7
Free USB Port
CD-ROM Drive



Step 1: (Optional) Secure your Sentinel Advance with StormGuard™ security .

Step 2: Plug Sentinel Advance into any free USB port on your computer system.

Step 3: Turn on the computer system; Windows® will automatically install the necessary programs.

Step 4: Open->Control Panel->System->Hardware->Device Manager and confirm that your mouse is working properly.

Step 5: Insert Storm Tactic AP Software CD into CD-ROM drive.

Step 6: When the Storm Tactic AP Software setup screen appears, select Driver Installation (optional) or Driveless Execution.

Step 7: Customize your Sentinel Advance through Storm Tactic AP Software

NOTE:

1. Regular updates will be available for the Sentinel Advance. For the latest firmware please visit the CM Storm home page: http://www.cmstorm.com.
2. The Sentinel Advance is a high performance gaming mouse with mass data transfer rates. To ensure optimal performance we do recommend plugging the mouse directly to system USB port and not a USB HUB.
3. During customization, the Sentinel Advance must be connected to the computer system. Do not remove the mouse during customization.

LAN-friendly Driverless Setup

LAN-friendly and Driver-free

As a LAN-friendly gaming mouse, the Sentinel Advance is driver-free, enabling you to bring your mouse to LAN-parties, internet cafes, and other out-of-home locations without extra system installation.

Setup: Copying Source Files

For driverless freedom, simply copy the files from the Storm Tactic AP Software CD, and paste the application files in to a removable drive of your choice. Please make sure that the files are copied on to the local hard disk at the new destination before launching the software. The application will automatically create three folders in the local drive – “Firmware”, “Images” and “Library” to store your tactical settings.

Launching the Application

To launch application, double click on CMSTORM.EXE, and Storm Tactic setup page will appear, choose Driverless Execution and the application will search and load initial mouse settings into the Sentinel Advance. During data exchange the top of the Sentinel Advance will flash, please wait few seconds for the application to

Data Exchange Mode

The Sentinel Advance is not connected to system

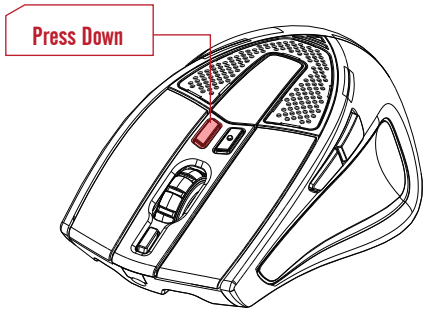
Hardware Control

Switch your DPI mechanically with the Sentinel Advance

Step 1:

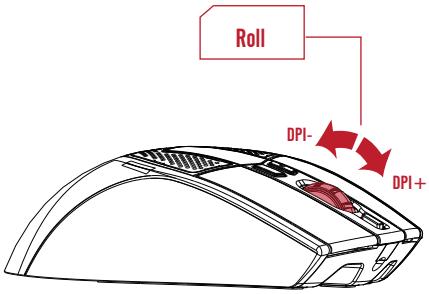
- Press DPI [-] switch down for 3 seconds to activate mechanical DPI switch mode.

Note: The Octoshade LED Tech will flash during mechanical DPI switch mode.



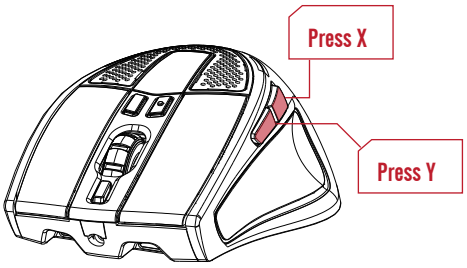
Step 2:

- Roll the mouse roller forward to increase DPI.
- Roll the mouse roller backward to decrease DPI.



Step 3:

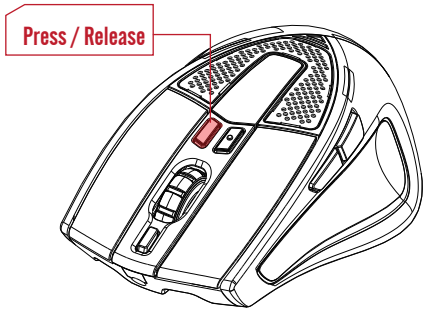
- Press IE Back button to configure X indepedantly.
- Press IE Forward button to configure Y indepedantly.



Step 4:

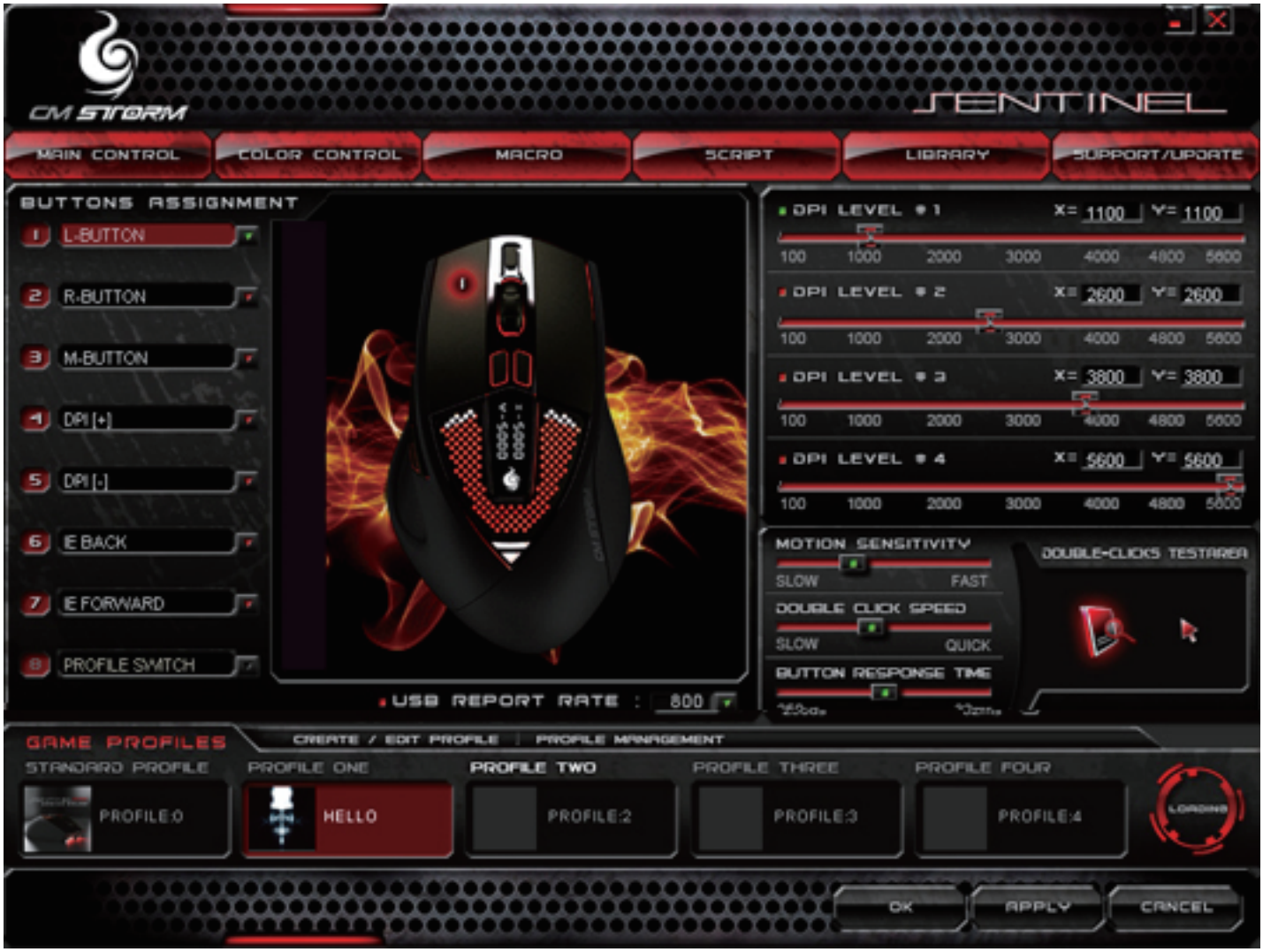
- Press DPI [-] switch and release to exit mechanical DPI switch mode.

.



Main Control

Configuring your Storm Tactic AP Software



Main Control

The main control allows users to have full control over DPI levels, intrinsic mouse settings, and programmable button assignments. After configuration is complete, you can safeguard all your settings inside the 64KB Sentinel-X™ Onboard Memory; all settings are manageable within the gaming profile system.

Note: All settings can be stored internally, allowing applied settings to be utilized on another computer without the Storm Tactic AP Software installed.

Main Control Modules:

- Button Assignment
- DPI Level Control
- Motion Sensitivity
- USB Report Rate
- Game Profiles

Main Control

Button Assignments

- From the drop down menu, you can re-define each button based on your own preference.
- In addition to buttons re-assignment, there are also various functions to utilize such as scripts, macros, rapid fire mode, multimedia and internet functions.

Note: To assign scripts and macros to a specific button, you must first record macro or script in the corresponding menu of your selection.

General Button Assignments

Disable:	Switches the mouse button off
L-Button	Left Click
R-Button	Right Click
M-Button	Scroll Wheel Click
IE Forward	Select the next previously selected program or website
IE Back	Select the previous program or website
DPI [+]	Increases DPI resolution
DPI [-]	Decrease DPI resolution
Cyclic DPI [+]	DPI resolution loop increase
Cyclic DPI [[-]	DPI resolution loop decrease
Macro	Assigns preset macro to button
Script 1 - 6	Assigns preset script to button
Profile Switch	Profile Switch: Switch to next profile
Standard Profile	Jump to standard profile
User Profile 1-4	Jump to selected user profile
Profile [+]	Jump to next profile
Profile [-]	Jump to previous profile
Motion On/Off	Turns mouse motion on and off
DPI Level 1-4	Jumps to the DPI Level of choice

Main Control

Advance Button Assignments

Keyboard

This option is made to emulate keyboard commands; single or compound short-cuts can be inserted and assigned to memory. The process is as follows.

Step 1 Image:

Step 2 Image:

Step 1: Choose a button and select "Keyboard" from the drop down menu.

Step 2: Input the command by keyboard. (Clear input by clicking icon C)

Step 3: Press Apply to activate new setting.

Multimedia

Sentinel Advance can also emulate Multimedia (Human Interface Device, HID) by specific code. The process is as follows.

Step 1 Image:

Step 2 Image:

Step 1: Choose a button and select "Multimedia"

Step 2: Select a Multimedia function,or enter a HID code.

Step 3: Press Apply to activate new setting.

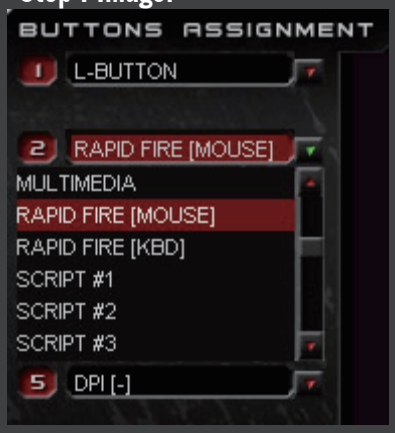
Main Control

Advance Button Assignments

Rapid Fire Mode

The Rapid Fire Mode allows gamers to assign automatic firing power to 6 function buttons on the Sentinel Advance. The rapid shots can be looped continuously or repeated from ranges of 1shot to 254 shots; user can also define the time duration with each shot and also the time interval between each shot.

Step 1 Image:



Step 2 Image:

Step 1: Choose a button and select "Rapid Fire(Mouse)" or “Rapid Fire (Keyboard)”.

Step 2: Define the button to emulate.

Set the shooting times and speed.

Column A: Rapid fire counts: Place a number from 1 to 254. 255 for continous loop shots while held.

Column B: Each shot time duration while button is pressed: Place a number from 1~255.

Column C: Interval time duration between two shots : Place a number from 1~255.

Step 3: Press Apply to activate new setting.

Main Control:

DPI Level Control

With default DPI levels set at 1100, 2600, 3800 and 5600; you can manually fine tune each DPI by either adjusting the DPI slider or through text definition in the X and Y DPI input box. To suit your gaming environment X & Y can be adjusted independently.

USB Report Rate

The USB report rate can be set to 100Hz, 111Hz, 125Hz, 142Hz, 166Hz, 200Hz, 250Hz, 333Hz, 500Hz, and or 1000Hz. The higher the USB report rate the more times the computer communicates with the mouse with information, at a high dpi resolution we suggest setting the report rate at 1000Hz.

Windows Sensitivity Control

Motion Sensitivity

Adjust windows pointer sensitivity here from slow to fast. We recommend keeping the sensitivity level in the middle under regular usage, and tuning the sensitivity slower while operating under a high DPI setting such as 5600DPI.

Double Click Speed

The double-click response slider area allows you to adjust your double-click speed from slow to fast. Essentially slow means a longer interval between each click, and fast as a shorter interval between each clicks.

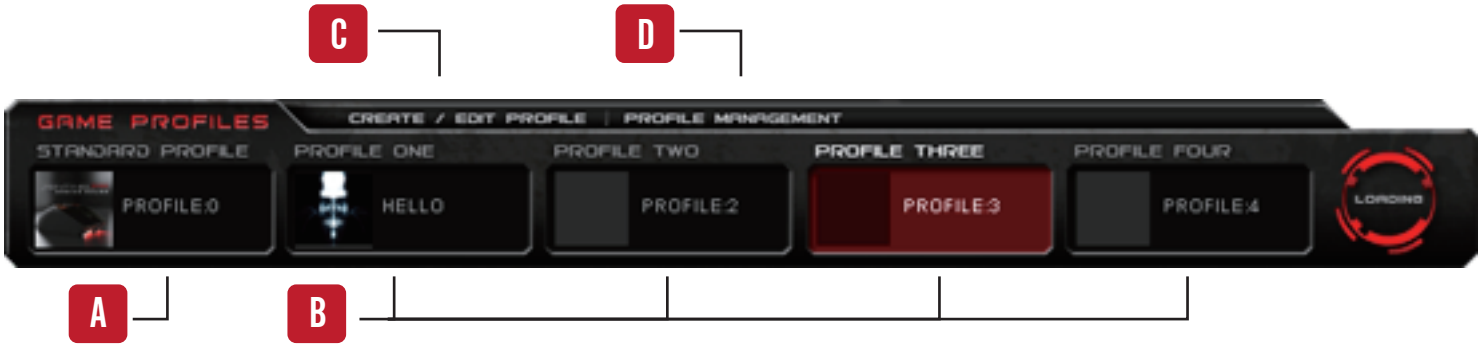
Button Response Time

Here users are allowed to adjust button response time from 250 microseconds to 32 milliseconds.

Game Profiles

Game Profiles

The Game Profiles area holds 5 sets of profiles – 1 standard and 4 customizable profiles are available for settings creation and data storage management. All setting changes are registered into the internal Sentinel-X™ Memory, allowing users to load presets from memory and perform without reconfiguration.



A Standard Profile

The standard profile acts as a factory default and limits users to general behavior settings such as “DPI level”, “Motion Sensitivity”, “Double Click Speed”, “Button Response Time”, “USB Report Rate” and “Color Control”. Users may conveniently switch back to standard mode to troubleshoot setting errors made in other profiles.

B Customizable Profile

In addtion to the functions available in the standard profile, customizable profiles allows users to alter button assignments, assign dedicated gaming buttons and activate functions such as macro, scripts and Rapid Fire Tactical™ mode.

C Create/ Edit Profile

To organize and display your gaming profile name on the top display of the OLED, simply select the profile of choice, click Create/ Edit Profile under Game Profile and enter an English avatar name of 10 characters, after you are done press OK and store name to the internal Sentinel-X™ Memory. You may also upload a profile image in the same menu, and create a cool profile avatar for neat organization.

D Profile Management

Here the profile management system allows users to import and export profile through mouse and local hard disk.

Color Control

Configuring your Octoshade™ LED

Color Control

Take pride in your team colors, whether it is red + white, yellow + blue or fully white, the Octoshade™ LED lighting system allows an 8 shade color combination and a 4 color stylization option to be applied to the front and top positions of the LED area. In addition to the color customization, you may also upload your personal team logo and tag it on the OLED display area.

Color Control

1. Choose Color

Simply click and choose the color of choice:

Octoshade™ Front LED: [Off-Red-Green-Blue-Yellow-Purple-Turquoise-White]
Octoshade™ Top LED: [Off-Red-Green-Blue-Yellow-Purple-Turquoise-White]

2. Choose Style

Simply click and choose the style of choice

Available Styles:
[Full Color-Breathing-Rapid Fire-Disable]

3. Choose Logo

Upload and tag your team logo

Upload the team logo of your choice from your local hard disk, the file format should be 32 px by 32 px black and white color in BMP format. Click revert to reload CM Storm logo.

Macro

Configuring your Storm Tactics™ Macro Support

Macro Function

Vital to in-game situations and to further fortify input performance, the Storm Tactics™ Macro Support system allows gamers to record all keyboard and mouse inputs into a sequential and organisable format. Storm Tactics™ Macro Support system allows 124 byte length of string storage, which allows users to input single or compound commands executable to variable methods of choice. With ability to have manageable time delays between each command users can have full control and conveniently assign macros to buttons 3-7 on each profile of the Sentinel Advance.

Creating a Macro

Under the "Macro" menu click NEW to create a brand new macro, or LOAD to edit a preset macro previously assigned to a button.

Macro Recording and Editing

A Macro Recording

Move the cursor to the "record area", click on Start Record to record keyboard and mouse instructions. After you've finished recording, click Stop Record to enable macro editing mode.

Note: After recording, users can edit each "Macro Line" by selecting the recorded data in the left column.

B "With time"

By activating this function, the time duration of each button press, button release and time intervals between each command will be automatically registered and recorded.

C "Insert"

By activating this function, keyboard and mouse input recordings will be inserted after the selected "Macro Line" of your choice.

D Navigating Macro Data Priorities:

Click Move Up & Move Down to alter "Macro Line" position

E Macro Data Removal:

Click DELETE, to remove the selected "Macro Line".

F Edit Macro Data and Time Delay:

Double click on the "Macro Line" and edit data assignments and time delays.

G There are 5 execution methods:

Loop (released): The recorded macro will be executed repeatedly when the assigned button is released. To stop execution, simply perform the same button release.

One shot (released): The recorded macro will be executed once when the assigned button is released.

One shot (press): The recorded macro will be executed once when the assigned button is pressed.

Loop (hold): The recorded macro will be executed when the assigned button is pressed. Release to stop the execution.

Loop (press): The recorded macro will be executed repeatedly when the assigned button is pressed. To stop execution, simply perform same button release.

Script

Configuring your Storm Tactics™ Script Support

Script Function

The Storm Tactics™ Script Support system is an advanced macro editor coupled with a robust scripting engine. A total of 6 script assignments are available, with each holding 256 byte length of string storage. For users with basic programming knowledge, the script command line allows users to add extra commands such as "GOTO", "IF", "IF (Variable)", "CALL", "Repeat", "Pause", "Stop" , "Left and right button down/ up", record "Mouse Motion" and assign "Variable". Along with scripting abilities virtually all Multimedia (HID) commands can be embedded as well.

Creating a Script

Under the "Script" menu click NEW to create a brand new script, or LOAD to edit a preset script previously assigned to a button.

Script Recording and Editing

A Script Recording

Move the cursor to the "record area", click on Start Record to record keyboard and mouse instructions. After you've finished recording, click Stop Record to enable script editing mode.

Note: After recording, users can edit each "Script Line" by selecting the recorded data in the left column.

B "With time"

By activating this function, the time duration of each button press, button release and time intervals between each command will be automatically registered and recorded.

C Edit Script Data and Time Delay:

Double click on the "Script Line" and edit data assignments and time delays.

D "Insert"

By activating this function, keyboard and mouse input recordings will be inserted after the selected "Script Line" of your choice.

E Navigating Script Data Priorities:

Click Move Up & Move Down to alter "Script Line" position

F Script Data Removal:

Click DELETE, to remove the selected "Script Line".

G Command Script Insert

Script command line allows users to add progamming commands with the activation of multimedia (HID) functions. Press ADD to add to the last line of "Script Line" or INSERT to insert it under the selected "Script Line" of choice.

Note: To run "2-phase" and "Multi-stage" execution "Stop", "Pause" is required within the instruction time line.

H There are 8 execution methods:

Loop (released): The recorded script will be executed repeatedly when the assigned button is released. To stop execution, simply perform the same button release.

One shot (released): The recorded script will be executed once when the assigned button is released.

One shot (press): The recorded script will be executed once when the assigned button is pressed.

Loop (hold): The recorded script will be executed when the assigned button is pressed, release to stop the execution.

Loop (press): The recorded script will be executed repeatedly when the assigned button is pressed. To stop execution, simply perform same button release.

2-phase: There is a "pause" command in the recorded script, when the assigned gaming button is pressed, the script will be executed and stop on the "pause" command, release the button the execution continue.

Multi-stage (press): There are several "pause" commands in the recorded script, when the assigned gaming button is pressed, the script will be executed and stop on the "pause" command, press the button the execution continue and stop on the command before the next "pause".

Multi-Stage (released): There are several "pause" commands in the recorded script, when the assigned gaming button is released, the script will be executed and stop on the "pause" command, release the button the execution continue and stop on the command before the next "pause".

The Library:

This library function allows you to save macro & script to your local hard disk.

The Step as following:

A. Upload Macro file

1. Select "◉SELECT MACRO"
2. Select the profile and macro button you want to upload to library
3. Select←Upload to Library
4. Input the file name (*.mac, macro file), then save it.

B. Download Macro file:

1. Select "◉SELECT MACRO"
2. Select the file in the "MACRO LIBRARY" that you want to download to mouse
3. Select the profile and macro button you want to download
4. Select→Download to Mouse

C. Upload the Script file

1. Select "◉SELECT SCRIPT"
2. Select the Script you want to upload to library
3. Select←Upload to Library
4. Input the file name (*.sh, script file), then save it.

D. Download Script file

1. Select "◉SELECT SCRIPT"
2. Select the file in SCRIPT LIBRARY
3. Select the Script #1, 2, 3 you want
4. Select→Download to Mouse

Support and Update

CM STORM
SENTINEL
MAIN CONTROL
COLOR CONTROL
MACRO
SCRIPT
LIBRARY
SUPPORT/UPDATE
SUPPORT / UPDATE
The CM Storm online support is your portal to any inquiry you may have in regards to your CM Storm Sentinel gaming mouse. At CM Storm we always aim to ensure prompt updates, and provide optimal drivers for your unique system configuration. Should you encounter any difficulties, you may always get our support by using the CM Storm support forum. Add any inquiries you may have and a dedicated support representative will reply with a prompt and applicable solution.
The automatic update function will check your system configuration and upgrade your driver with the newest updates.
www.cmstorm.com
ONLINE SUPPORT
UPDATE
GAME PROFILES
CREATE / EDIT PROFILE
PROFILE MANAGEMENT
STANDARD PROFILE
PROFILE ONE
PROFILE TWO
PROFILE THREE
PROFILE FOUR
PROFILE:0
HELLO
PROFILE:2
PROFILE:3
PROFILE:4
LOADING
OK
APPLY
CANCEL

Technical Support

For technical support and the latest drivers and firmware, please visit

www.cmstorm.com Email: eservice.tw@cmstorm.com

Update Firmware

Download the latest firmware from CM Storm website and click UPDATE to load the latest firmware.

Warranty

Two years' limited manufacturer's warranty

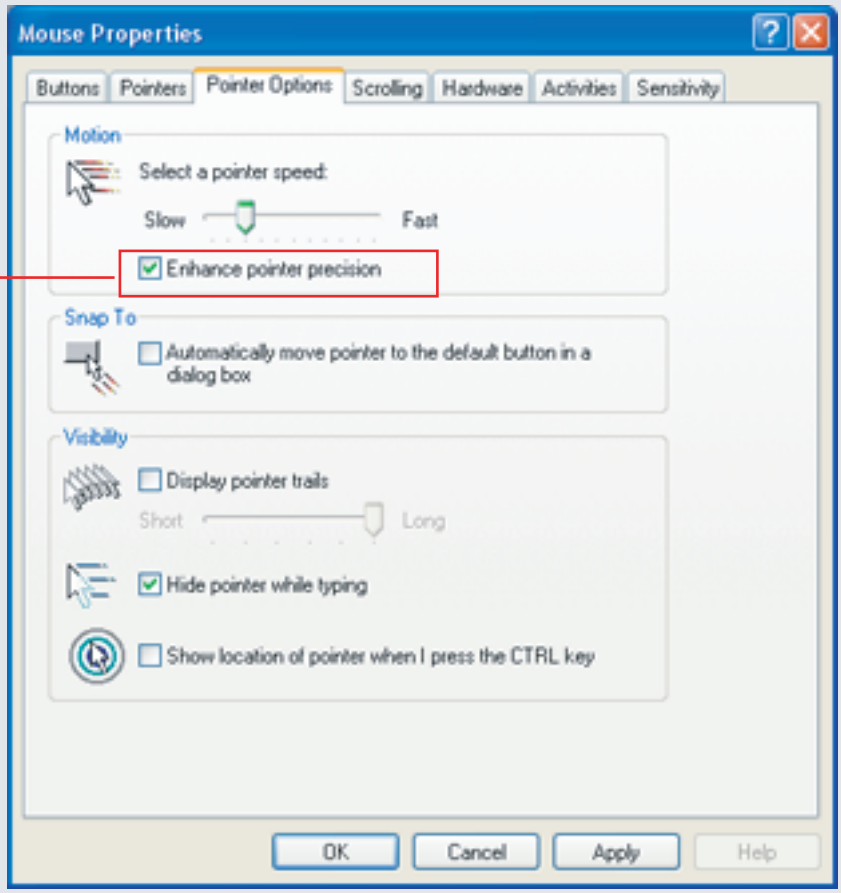
Q&A

Q1. Hi, I just plugged in the mouse and the cursor doesn't work so well? What can I do?

A: By default the Sentinel Advance should work virtually on any gaming mouse pad or surface.

If this happens, please try to reduce the USB report rate on the Stom Tactics AP Sofware. Your system may not support the current USB report rate.

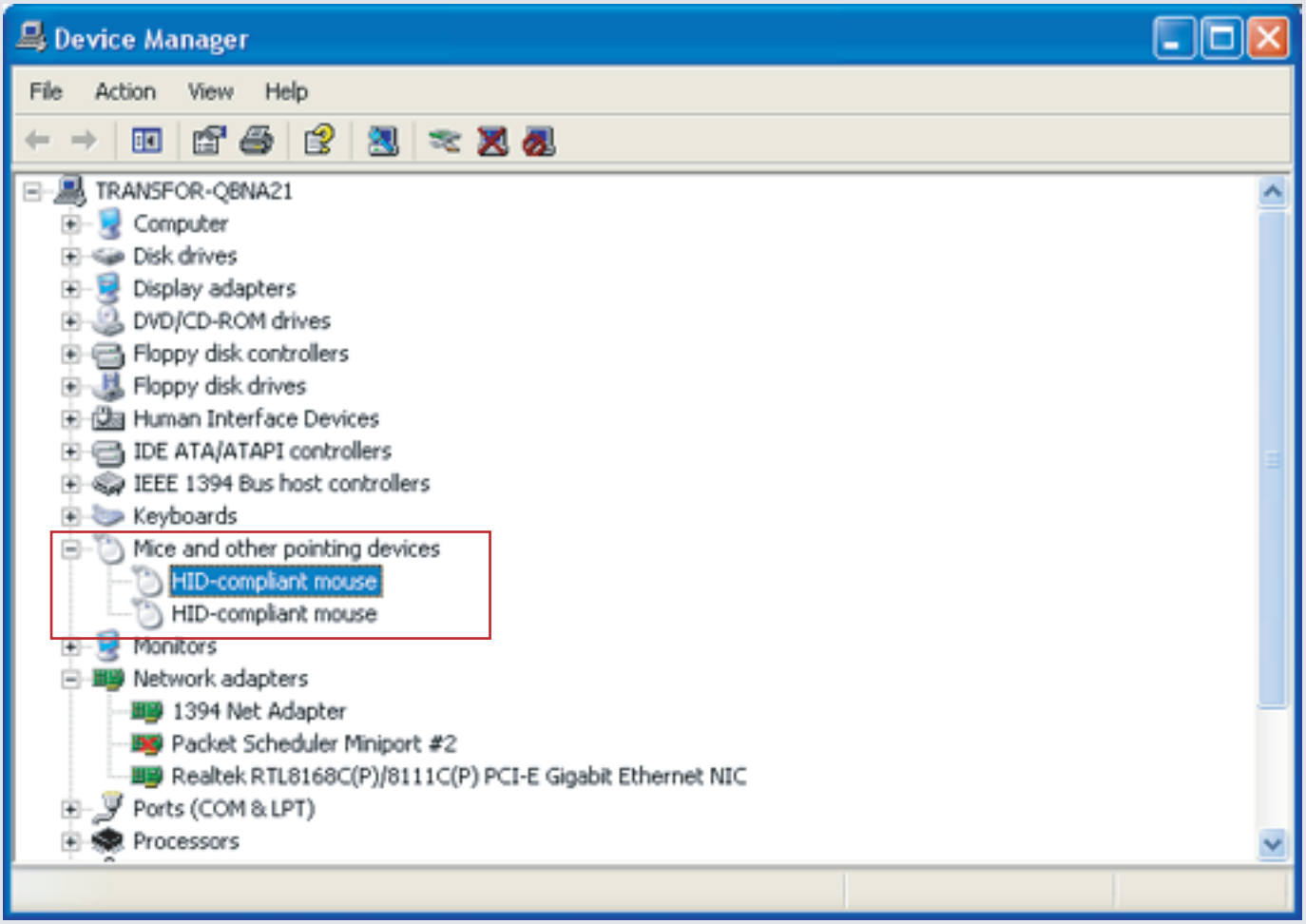
B: Choose the "Enhance pointer precision" in the Mouse Pointer Option, for the better performance.



Q&A

Q2. The Sentinel Advance is connected to the PC, but not enabled. What can I do?

A: Here are possible solutions:
1. First try to change to another USB port.
2. USB registry error process: my computer>View system information>hardware>computer management >device management>mouse & other pointing device> delete the hid compliant mouse (Sentinel Advance)>unplug Sentinel Advance mouse> re-plug Sentinel Advance.



Cooler Master Co., Ltd.

9F,No.786,Chung Cheng Road,Chung Ho city,Taipei,Taiwan, R.O.C.

Tel: +886-(0)2-32340050

Email: eservice.tw@cmstorm.com

For the most updated information, please visit our official website: http://www.cmstorm.com

Ver 1.0: 2009/07